

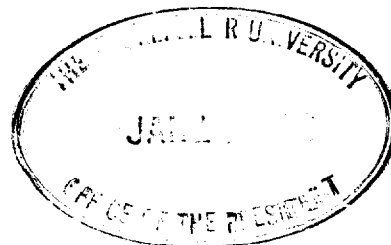
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12th January, 1989.

Dr. J. Lederberg,  
President,  
The Rockefeller University,  
1230 York Avenue,  
NEW YORK, N.Y., 10021.  
United States of America.



Dear Dr. Lederberg,

Thank you for your note and your interest in our paper on determination of  $\text{Na}^+$  with  $\beta$ -galactosidase.

For a number of years I had thought it should be possible to measure, albeit somewhat crudely, the concentration of  $\text{K}^+$  in plasma by utilizing the sensitivity of pyruvate kinase to that cation. When we finally attempted this we found that the method was far better than we had reason to expect, and compared well with present methods using selective electrodes or flame photometry. Thus it appeared that we had developed a spectrophotometric method for  $\text{K}^+$  which could be used on large automatic analysers.

It quickly became apparent, however, that the method would have little penetration unless an analogous method for  $\text{Na}^+$  could be found. Accordingly, I went to the literature to look for a  $\text{Na}^+$ -sensitive enzyme. I soon came across your publication and that of Kuby and Lardy written a few years later. The enclosed reprint tells the rest of the story. Suffice to say that again the enzymatic method has proved to hold its own with the best of current methodologies, and for various reasons it may well prove the method of choice in many situations.

When, some 20 years ago, I was an Associate Member of the Cardiovascular Research Institute of the University of California in San Francisco, I recall the late Julius Comroe frequently pointing out the essential role of basic research in regard to developments in the Clinical field. The point was made that often the development came many years after the critical basic research was done, and that frequently the basic research was in a field far removed from that of the clinical development. I have used these arguments over and over again, in endeavouring to help persuade "the powers that be" of the value of basic research, and how important it is to keep funding it. (In fact my major research effort is in basic research.) It is therefore particularly gratifying to have been able to demonstrate at first hand the link between fundamental and applied research. I am also delighted that you as the individual responsible for that initial research should have noted our publication and been interested in how we came to do the work.

With best wishes,

Yours sincerely,

*Michael Berry*

Michael N. Berry.  
Professor and Head,  
Department of Medical Biochemistry.